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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,170	10/21/2003	Igor Y. Khandros	P197-US	3947

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EXAMINER

NGUYEN, TUNG X

ART UNIT PAPER NUMBER

2829

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,170

Applicant(s)

KHANDROS ET AL.

Examiner

Tung X. Nguyen

Art Unit

2829



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 20-21, 33-40, are rejected under 35 U.S.C. 102(b) as being anticipated by Brady et al. (u.s.p 6,236,223).

As to claim 1, Brady et al. disclose in Figs. 1-2, a method and apparatus for testing a electronic device comprising: a tester (228 of figure 2A) for transmitting wirelessly (via 222) test data, and a test station (232 of figure 2A) for holding the electronic device (212 of figure 2A); a fixture (218 of figure 2A) for receive and testing the signal from the electronic device (via probe 218) at the test station and transmitted test data (via 220 of figure 2A).

As to claim 2, Brady et al. disclose in Figs. 1-2, a transmitter (220 of figure 2A) for transmitting results of the testing wirelessly from the test station (232) to the tester (228).

As to claim 3, Brady et al. disclose in Fig. 2C, testing a plurality of electronic devices (212 of figure 2C) at the test station (238) using the transmitted test data (via 220).

As to claim 4, Brady et al. disclose in Figs. 1-2, the test data comprises commands and the step of testing an electronic device comprises executing the commands (col. 3, lines 45-50).

As to claim 20, Brady et al. disclose in Figs. 1-2, a tester comprising: initiating means (216, 220) for wirelessly initiating testing of an electronic device (212 of figure 2A) at a test station (232 of figure 2A); and receiving means (228 of figure 2A) for wirelessly receiving results of the testing from the test station (232).

As to claim 21, Brady et al. disclose in Figs. 1-2, the initiating means (216, 220 of figure 2C) further comprises means for initiating testing of a plurality of electronic devices (212) at the test station (238).

As to claim 33, Brady et al. disclose in Figs. 1-2, a test station comprising: an electronic device (212 of figure 2A) to be tested; receiving means (222 of figure 2A) for wirelessly receiving test data from a tester (228 of figure 2A); and testing means (216 of figure 2A) for testing the electronic device in accordance with the test data.

As to claim 34, Brady et al. disclose in Figs. 1-2, means (216 of figure 2D) for wirelessly transmitting results of the testing to the tester (228).

As to claim 35, Brady et al. disclose in Figs. 1-2, the receiving means (222 of figure 2D) further comprising means for receiving test data from a plurality of testers (216 of figure 2D).

As to claim 36, Brady et al. disclose in Figs. 1-2, the testing means (216 of figure 2D) comprising: means (each 216) for testing the electronic device (212) in accordance with first test data received from a first tester (216) of the plurality of tester;

and means (other 216) for testing the electronic device in accordance with second test data received from a second tester (other 216 of figure 2D) of the plurality of testers.

As to claim 37, Brady et al. disclose in Figs. 1-2, further comprising transmitting means (220 of figure 2D) for wirelessly transmitting to the first tester results (216) of the testing in accordance with the first test data and to the second tester results (other 216) of the testing in accordance with the second test data.

As to claim 38, Brady et al. disclose in Fig. 2C, 2D, a plurality of the electronic devices (212 of figure 2C) are disposed at the test station (238), and means (214, 216 of figure 2C, 2D) for testing a first subset (one of 212) of the plurality of electronic devices in accordance with test data received from a first tester (216 of figure 2D) of the plurality of tester; and means for testing a second subset (other 212) of the plurality of electronic devices in accordance with test data received from a second tester (216 of figure 2D) of the plurality of testers.

As to claims 39-40, Brady et al. disclose in Figs. 1-2, further comprising means for wirelessly transmitting a request to the tester (216 of figure 2C, 2D) to configure the tester to transmit test data to the test station (238 of figure 2D).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al. (u.s.p 6,236,223), in view of Rostoker et al. (u.s.p 5,539,325)

As to claim 5, Brady et al. disclose in Figs. 1-2, all of the limitations except for the electronic device comprising a self-test circuitry. However, Rostoker et al. disclose the electronic device comprising a self-test circuitry (col. 6, lines 15-20) for detecting the block of the electronic device. Therefore, It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify system of Brady et al., and provide the self-test circuitry, as taught by Rostoker et al., for detecting the block of the electronic device.

5. Claims 6-19, 22-32, 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al. (u.s.p 6,236,223), in view of Deckert et al. (u.s.p 6,137,303).

As to claims 6-7, 9-13, 22-23, Brady et al. disclose in Figs. 1-2, all of the limitations except for a plurality of test stations. However, Deckert et al. disclose in Figs. 1, the plurality of test stations (32 of figure 1) for saving time in testing plurality of electronic devices. Therefore, It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system of Brady et al., and provide the plurality of test stations, as taught by Deckert et al. for saving time in testing plurality of electronic devices.

As to claim 8, Deckert et al. disclose in Figs. 1, the test data transmitted to at least one of the test station is different than test data transmitted to another of the test stations (via controller 25 of figure 1).

As to claim 14, Brady et al. disclose in Fig. 1, the first test and second test are different tests.

As to claims 15, Brady et al. disclose in Fig. 2C, a plurality of the electronic devices (212 of figure 2C) are disposed at the test station (238), and the first test is performed on a first subset (each one 212) of the plurality of electronic devices, and the second test is performed on a second subset (other one 212) of the plurality of electronic devices.

As to claims 16-19, 29-32, 41-44, Brady et al. disclose in Fig. 2C, the test station (238 of figure 2C) comprises a prober (214) and the semiconductor wafer (212).

As to claims 24-25, Deckert et al. disclose in Fig. 1, adding means (25 of figure 1) for adding an additional test station (32) to the plurality of test stations (32).

As to claim 26, Deckert et al. disclose in Fig. 1, means (25 of figure 1) for removing one of the test stations (32) from the plurality of test stations (32).

As to claim 27, Deckert et al. disclose in Fig. 1, means (26-28 of figure 1) for signaling another tester (26) that result of testing have been received from the test station (12-13 of figure 1).

As to claim 28, Brady et al. disclose in Figs. 1-2, means for receiving a signal from another tester (216, 214 of figure 2D), that testing of the electronic device (212) by the other tester (216 of figure 2D) is completed, wherein the initiating means initiates the testing in response to the signal from the other tester (216).

Conclusion


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X. Nguyen whose telephone number is (571) 272-1967. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (571) 272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN
4/22/05


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PRIMARY EXAMINER
A.U. 2829
04/28/05